

## **December 2005 - Review of Weather Including Temperatures and Precipitation for the Quad State Region.**

### **Weather Summary for December 2005**

#### **Precipitation**

While fairly active, December was a cold and dry month with the first reports of snow. Temperatures for most of the month were below normal with highs on many days struggling into the 30s. For the month, temperatures were 2 to 3 degrees below normal (35 to 37 degrees). Locations across the region ended December with 1 to almost 4 inches below normal precipitation. Many locations from southeast Missouri and southwest Illinois received less than 1 inch for the entire month. By the first of the new year, the Drought Monitor had earmarked southeast Missouri and west Kentucky as abnormally dry. Without a change in the overall weather pattern most of the western and southern parts of the Hydrologic Service Area will slip back into drought conditions.

In Paducah, annual precipitation was 37.45 inches, which is around 11.5 inches below normal. This became the 6<sup>th</sup> driest year in Paducah. The average temperature was 58.7 degrees, which makes it the 9<sup>th</sup> warmest year on record. On contrast, Evansville, Indiana ended the year with precipitation only around 3 inches below normal and an average temperature of 57.1 degrees. Neither of these broke into any "Top 10" lists for Evansville.

The weather pattern was very active in the upper levels of the atmosphere throughout December. Two very quick systems passed over the region during the first few days of the month touching off a few showers. In general, rain amounts were less than one-quarter of an inch and in most cases, less than one-tenth of an inch. Cold high pressure built over the area and when a slightly stronger system moved through on the 8<sup>th</sup>, rain showers changed over to snow showers. Many areas received their first snowfall. While southern areas received one inch or less of the white stuff, northern areas near the I-64 corridor received 2- 3 inches.

Two more storm systems passed quickly across the region on the 11<sup>th</sup>-12<sup>th</sup> and 14<sup>th</sup>-15<sup>th</sup>. Rainfall amounts were generally between one-quarter and one-half inch. Rain even mixed with snow in some locations but no accumulations were recorded. As the region headed toward the holidays, a much stronger low dropped into the Central Plains drawing in warmer air and more moisture from the Gulf of Mexico. As this system moved east, scattered showers developed producing rainfall amounts less than one-half of an inch. Right on its heels, another low developed over the mid-Mississippi Valley on the 28<sup>th</sup>. Scattered showers and even a few thunderstorms developed as this system slowly moved east into the Ohio Valley. Some of the stronger storms produced hail the size of dimes and nickels. Rainfall amounts were, again, less than one-half of an inch.

**Figure 1. December 2005 Average Daily Temperature Summaries (Degrees F) for Several Quad State Region Locations.**

<u>LOCATION</u>	<u>TEMPERATURES</u>	<u>HIGH</u>	<u>LOW</u>	<u>AVERAGE</u>
<i>Carbondale Illinois</i>	Normal (94 years)	44.3	25.7	35.2
	<b>2005</b>	41.7	25.0	33.4
<i>Cape Girardeau Missouri</i>	Normal (30 years)	44.7	28.3	36.8
	<b>2005</b>	43.0	24.4	33.7
<i>Evansville Indiana</i>	Normal (30 years)	44.0	27.7	36.1
	<b>2005</b>	40.4	25.1	32.8
<i>Paducah Kentucky</i>	Normal (30 years)	46.5	29.0	38.0
	<b>2005</b>	42.9	26.0	34.5
<i>Poplar Bluff Missouri</i>	Normal (30 years)	46.6	28.2	37.6
	<b>2005</b>	43.1	25.7	34.4

**Figure 2. December Average Monthly Precipitation (inches) and 2005 Observed Precipitation for Several Quad State Region Locations.**

<u>LOCATION</u>		<u>TOTAL PRECIPITATION</u> (includes melted snow)	<u>2005 DEPARTURE</u> <u>FROM NORMAL</u>
<i>Carbondale Illinois</i>	Normal:	3.73	-3.08
	<b>2005:</b>	0.65	
<i>Cape Girardeau Missouri</i>	Normal:	4.28	-3.67
	<b>2005:</b>	0.61	
<i>Evansville Indiana</i>	Normal:	3.54	-0.99
	<b>2005:</b>	2.55	
<i>Paducah Kentucky</i>	Normal:	4.38	-2.94
	<b>2005:</b>	1.44	
<i>Poplar Bluff Missouri</i>	Normal:	4.31	-3.82

	<b>2005:</b>	0.49	
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